

**NW 110<sup>th</sup> St., 3<sup>rd</sup> Ave. NW to Greenwood Ave. N**

**SCOPE OF WORK**

*Date: May 8, 2001*

**Author:** James R. Johnson, Project Manager

**Client Lead:** Darla Inglis, PhD.

**Program:** Comprehensive Drainage Improvements C3301

**WA #:** C301320

**I. PROJECT LOCATION:** Project area is in the NW portion of the city. Along NW 110th, from 3rd Avenue NW to Greenwood Ave NW. Project area is within right-of way only, and all work will be outside of street. The site has a combination of slopes, ranging from 1-8%.

**II. PROBLEM STATEMENT, DESCRIPTION and JUSTIFICATION:** The 21-acre drainage basin collected and conveyed along 110th contributes high flows (18 cfs for the 25-year storm) and pollutants to Pipers Creek. Additionally the culvert under 3<sup>rd</sup> Ave NW experiences overtopping from flows from NW 110<sup>th</sup>.

This project addresses local neighborhood drainage improvements. This project will redesign and configure the current asphalt lined drainage ditch and culvert system to address the objectives described below.

Project Justification:

- Improve management of high volume surface water entering sensitive receiving water.
- Improve quality of urban runoff entering creek system
- Use project as a pilot to evaluate improvements to the informal drainage system.
- Address stormwater management problem that was identified under Greenwood preliminary engineering study and Piper Creek Phase 2 work.

**III. PROJECT SCOPE OF WORK, OBJECTIVES, MEASUREMENTS AND DELIVERABLES:**

Provide alternative drainage improvements achieving water quantity, water quality benefits, while meeting stormwater conveyance and pedestrian and vehicle safety standards. Provide these improvements at minimum cost. Goals below are listed in decreasing order of priority.

1. Establish and adhere to Safety Standards
  - Maximum depth of standing water criteria: 1-foot
  - Maximum time of standing water: 24-hours after storm-event ends
  - Have SEATRAN explain vehicle recovery distance guidelines and follow if possible.
2. Conveyance of 25-yr, 24-hr storm through full project length, including culvert under 3d Ave NW.
  - Method: Assess conveyance capacity of culvert. If undersized, provide culvert replacement plan.
3. Provide Detention
  - Option A: Detain flows generated by full drainage basin to reduce 2-year, 24-hr storm to predeveloped forested till conditions. (Roughly 1-acre foot)
  - Option B: Provide maximum volume of detention during 2-year, 24-hr storm. At minimum detain flows from adjacent residence and street.
  - Method: Surface detention, detention pipes under surface system as cost allows
4. Provide Water Quality Improvement as an added benefit
  - No set criteria of treating full water quality storm (6-month, 24-hr)
  - Method: Provide maintenance accessible sedimentation cells. Provide maximum vegetated flow path as site allows.
5. Minimize project costs
  - Method: Design project to minimize construction costs.
6. Provide aesthetic improvements in project area without creating an “attractive nuisance”
  - Method: Uniform vegetation down length of project. Ask homeowners preference of grass versus a more “wild” native vegetation look. Use artistic method to control flows, secure “1% for art” funds.

7. Maximize use of recycled materials
  - Method: Look for construction “waste” at scrap yards and by contacting other agencies. If post consumer products unavailable, contact manufactures for “seconds”.
8. Involve community
  - Method: Communications staff work with design team to inform and solicit input from residents. 3-dimensional modeling of project if necessary. Involve volunteer coordinator, Kathy Minch, for post construction events.

**IV. BACKGROUND INFORMATION:** (Provided by the Client Lead.)

**V. PRELIMINARY ENGINEERING:** Greenwood preliminary engineering study and Piper Creek Phase 2 work.

**VI. SPECIAL CONDITIONS and PERMITS:** SEPA

**VII. RISK ANALYSIS, CONSTRAINTS and ASSUMPTIONS:** This project will be the largest Natural Drainage System constructed by SPU to date. Community Relations will be paramount to the success of the project and to the success of the Natural Systems program. Unlike SEA Streets, where community involvement was solicited before the project was initiated, and the project bypassed property owners who did not wish to participate, this project will only seek to mitigate the impacts of the design on the adjacent property owners and not bypass those who do not buy in.

**VIII. OPERATIONS & MAINTENANCE IMPACTS:** Operations and Maintenance will assume management of the project at project completion. A maintenance checklist will be completed to assure that all O&M elements are identified. Truck Sheets that outline maintenance elements and procedures will be developed for the use of field maintenance personnel.

**VI. REAL PROPERTY:** It is not anticipated that this project will require real property acquisition, easements or rights of entry.

**VII. COMMUNICATIONS PLAN:** A level three communication plan is anticipated.

**VIII. BUDGET:** \$900,000 total project budget

**IX. SCHEDULE:** Using the standard template as a base, the project manager should develop the initial project schedule for discussion and agreement within the project team using the CIP . Completion of the six milestones below is the only requirement for the final scope of work. The MSP schedule should be located on SPU4.)

<b>Project Initiation:</b>	<b>1Q01</b>
<b>Start Design:</b>	<b>2Q01</b>
<b>Finish Design:</b>	<b>1Q02</b>
<b>Award Construction Contract:</b>	<b>2Q02</b>
<b>Start Construction:</b>	<b>2Q02</b>
<b>Finish Construction:</b>	<b>4Q02</b>

**XII. PROJECT TEAM:**

<b>Name:</b>	<b>Position:</b>	<b>Responsibility:</b>
Jim Johnson	Project Manager	The Project Manager is the individual responsible for managing the overall project and its deliverables.
Darla Inglis	Client Lead	The Client is the customer/owner or end user of the product or service created by the project.
Trish Rhay	Operations Lead	The Operations Lead is the individual that represents the work group responsible for the on-going operations and maintenance of the project's end products.
Karen Reed	Public Information Specialist	The Public Information Specialist is the individual responsible for the development and implementation of the project's communications

		plan.
Tracy Chollak	Project Engineer	The Project Engineer is the individual with primary responsibility for providing technical and design engineering expertise for the project and for leading the design team to prepare technical designs and specifications.
Faith Fogarty	Environmental Mgmt. Lead	The Environmental Management Lead assumes the central role in environmental permitting and regulatory compliance process for the project's duration.
Merry Lee	Supervising Construction Engineer	The Supervising Construction Engineer leads the coordination of the construction team.
Henry Haselton	Materials Lab	Reviews geotechnical reports, soil information, project manual review, and fieldwork.
TBD	Resident Engineer	Single Point of Communications with the Contractor during the construction phase.
DeWayne Ticeson	Real Property Services Lead	The Real Property Services Lead is the individual responsible for obtaining easement, property and performing real property services in support of the project.
Russ Dodge	Survey Services	Provides Land Surveyor services.
Lori Palmen	Technical Resources	Technical drawing support, review of drawings to conform to City Standards, and record documents.
Cliff Jones	Specs and Estimates	Assists the project team in the development of the specifications, Finalize Engineer's Estimate & Completion of the Bid and Advertisement Process.

cc: Project Team  
File

Attachments: (Check)  
☐ Vicinity Map/Project Boundaries  
☐ Project Budget and CIP Initiation Form  
☐ Memorandum of Agreement, if required.  
☐ MSP Schedule  
☐ Communication Management Plan

## MANAGEMENT COMMITMENT AND ACCEPTANCE

**PROJECT:** (Same as above.)

The following signatures indicate acceptance of and commitment to the project specifications, schedule, and budget, as outlined in this proposal.

---

Project Manager: Jim Johnson

---

Date:

---

Client Lead: Darla Inglis

---

Date:

---

Operations: Trish Rhay

---

Date:

---

Environmental Management Services: Jay Laughlin

---

Date:

---

Director of Engineering Support: Brian Patton

---

Date:

---

Director of Construction Management: Glynda Steiner

---

Date:

---

Director of Drainage Wastewater & Solid Waste Engineering: Joy Keniston-Longrie

---

Date:

---

Director of Engineering Services: Thomas J. Tanner

---

Date:

Please see the attached scope of work. After reviewing the scope, **please sign page 3, check off your name on this list, and route to the next person.** Please let me know if you have any comments.

Sincerely,

Project Manager, Telephone Number

Project Manager Name [@ci.seattle.wa.us](mailto:@ci.seattle.wa.us)

- ☒ PM Name, 6<sup>th</sup> Floor DHB (Project Manager)
- ☐ Neil Thibert, 11<sup>th</sup> Floor DHB (Client Lead)
- ☐ Bette Robbins, 11<sup>th</sup> Floor DHB (Client Lead)
- ☐ Trish Rhay, 11<sup>th</sup> Floor DHB (DWU Design)
- ☐ Brian Patton, 8<sup>th</sup> Floor Muni (Support Services)
- ☐ Glynda Steiner, 6<sup>th</sup> Floor Muni (Construction Management)
- ☐ Jon Shimada, 6<sup>th</sup> Floor DHB (Project Management)
- ☐ Joe Talbot, 6<sup>th</sup> Floor DHB (Water and Wastewater Engineering Design)
- ☐ Tom Tanner, 6<sup>th</sup> Floor DHB (Engineering Services)

After all boxes are checked, return to:

- ☐ Project Manager, 6<sup>th</sup> Floor DHB (Project Manager)